Amendment to the Specification:

Please replace the Abstract with the following replacement Abstract:

REPLACEMENT ABSTRACT

ABSTRACT:

A data processing circuit on an integrated circuit and an associated method of processing data in the data processing circuit is provided, the data processing circuit comprising a network operable in successive time-slots; a plurality of data processing units interconnected by the network, and arranged to send streams of messages concurrently through the network, each stream comprising messages that occupy shareable resources in the network in a periodically repeating selection of successive time-slots, a period of repetition (P) being the same for all the streams; node circuits in the network arranged to forward the messages along multi-node paths through the network, each particular stream being assigned a respective stream specific path along which the node circuits forward all messages of the particular stream, the node circuits being arranged to decide whether to forward or discard each message dependent on a measure of seniority of the message in its particular stream.